

## ABSTRACT OF THE DISCLOSURE

A converter device is provided which has a power factor improving circuit that removes effects of noise superimposed on an AC power supply and reduces higher harmonics and improves the power factor. A power factor improving circuit (103) generally includes a voltage error amplifier (8), a current error amplifier (10), a comparator (11), a triangular wave oscillator (12), an output buffer (13), and a DC power supply (PS). A power factor improving unit (102) has a photocoupler (14) for detecting an output of an AC power supply (1) and a microcomputer (15), where the output ( $V_p$ ) of the photocoupler (14) is given to the MCU of the microcomputer (15). A D/A converter (17) in the microcomputer (15) gives a converter output (DAO) to the power factor improving circuit (103) and the power factor improving circuit (103) gives a reference voltage ( $V_{REF}$ ) to the D/A converter (17).